

32327
S/081/61/000/024/012/086
B138/B102

51190

AUTHORS: Balandin, A. A., Spitsyn, V. I., Duzhenkov, V. I., Bersova, L. I.

TITLE: Radiochemical method of producing metallic catalysts

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 24, 1961, 82, abstract 24B596 (Tr. Tashkentsk. konferentsii po mirn. ispol'zovaniyu atomn. energii, v. I, 1959. Tashkent, AN UzSSR, 1961, 289-295)

TEXT: The radiochemical stability of solutions of chloro-, hydroxy-, and chlorohydroxy-substituted complex compounds of platinum was investigated. The least stable compounds were found to be those having the trans-coordinate OH-Pt-Cl. Under radiolysis these compounds were completely reduced to the metal. Radiolysis of aqueous solutions of PdCl_2 and K_2PdCl_4 tends toward the complete reduction of Pd^{2+} to the metal. Metallic Pd has an inhibiting effect on the reduction process. Investigation of the catalytic activity of platinum blacks in the low-temperature hydrogenation of cyclohexane showed that a black produced by the radiation method has 4 to 5 times higher activity than those produced by the Zelinskiy method

Card 1/2

32327

Radiochemical method of producing...

S/081/61/000/024/012/086
B138/B102

of reduction. This is not the case with Pd. [Abstracter's note: Complete translation.]

X

2/2

S/148/62/000/008/007/009
EO71/E483

AUTHORS: Butakov, D.K., Pan'shin, I.F., Startsev, V.A.,
Bershteyn, L.I.

TITLE: On the problem of intergranular cracking in steel
castings

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Chernaya
metallurgiya, no.8, 1962, 143-149

TEXT: The object of the present investigation was to establish the origin and significance of bright shiny areas observed on dull-grey fracture surfaces of test pieces, examined in the course of routine quality control of Cr-Ni-Mo steel castings. Examination of fracture surfaces of various test pieces, metallographic examination of micro- and macro-structure, and magnetic crack-detection tests made it possible to distinguish between two types of shiny zones: one representing the surface of shrinkage cavities, the other corresponding to regions where microscopic, intergranular cracks were present in the casting. The effect of the casting temperature, pouring rate, rate of cooling (as determined by the time interval during which the

Card 1/2

... Institute)

S/276/63/000/002/012/052
A052/A126

AUTHORS: Pan'shin, I.F., Bershteyn, L.I., and Nizhel'skiy, P.Ye.

TITLE: The second stage of austenite decomposition and properties of steel after refinement

PERIODICAL: Referativnyy zhurnal, Tekhnologiya mashinostroyeniya, no. 2, 1963, 56, abstract 2B240 (Izv. Kurganskogo mashinostroit. in-ta, I, 1962, 77-81)

TEXT: The dependence of toughness and hardness of 30X2H2M (30Kh2-N2M) steel on the hardening temperature and on temperature and duration of tempering was investigated. For hardening, 10 x 10 x 55 mm samples were heated during 15 min in an electric furnace having temperatures of 890, 920 and 950°C, and they were cooled in calm air. By the magnetometric method it has been established that austenite decomposition begins at 420-430°C and ends below the martensite point of 310°C. Some samples were oil hardened (after heating to 890°C) for comparison. The hardness of air and oil-hardened samples was HB300 and HB477 respectively. High tempering was carried out at 500, 540, 580 and 620°C with 20, 90 and 300 min holding

Card 1/2

The second stage of austenite...

S/276/63/000/002/012/052
A052/A126

including heating time. After tempering the samples were oil cooled. The toughness was determined on samples at -40°C . Curves of the dependence of steel hardness on temperature and duration of tempering (after air and oil hardening) were plotted and tables of toughness and hardness are presented. As a result of the investigation it has been established that the formation of bainite structure in the process of hardening contributes to the increase of the amount of residual austenite the decomposition of which leads to an increase of hardness after tempering at 540°C . As a result of high tempering at a temperature of over 580°C a good combination of mechanical properties can be achieved in a steel having a mixed structure after hardening consisting of upper and lower bainite and martensite. There are 2 figures and 2 references.

T. Kislyakova

(Abstracter's note: Complete translation.)

Card 2/2

ORLOV, S.I.; ~~BERSHTEYN~~, L.V.

Using clay emulsions to recondition molding mixtures. Lit. proizv.
no.1:48 Ja '59. (MIRA 12:1)
(Molding machinery and supplies)

L 33380-86 EWT(m)/T/EWP(w)/EWP(t)/ETI IJP(c) ID/HW
 ACC NR: AP6019768 (N) SOURCE CODE: UR/0370/66/000/003/0118/0124
 AUTHOR: Zaymovskiy, V. A. (Moscow); Bershteyn, M. L. (Moscow)
 ORG: none
 TITLE: Preliminary thermomechanical treatment of carbon steel
 SOURCE: AN SSSR. Izvestiya. Metally, no. 3, 1966, 118-124
 TOPIC TAGS: carbon steel, steel heat treatment, thermomechanical treatment, steel property, thermomechanical property/40 steel, U9 steel
 ABSTRACT: Preliminary thermomechanical treatment (PTMT) of carbon steels St40 (0.43%C) and U9 (0.86%C) was tested in order to improve mechanical properties. Steel plates were cold rolled with 5, 10, 15, 25, or 50% reduction, tempered at 200, 300, 400, 500 or 600C for 1 hr, heated at a rate of 200C/sec up to 900C for U9 steel, and to 950C for St 40, water quenched, and finally tempered at 270-300C for 1-1.5 hr. PTMT improved considerably the mechanical properties of both steels. St 40, cold rolled with 10% reduction and tempered at 200C, had a tensile strength of 175 kg/mm², an elongation of 4.5%, and a reduction of area of 22.5%, compared to 162 kg/mm² and insignificantly little ductility after conventional treatment. U9 steel, cold rolled with 5, 15 or 50% reduction and tempered at 400C, had a tensile strength of 240, 230 and 210 kg/mm², an elongation of 5, 4 and 3.5% and a reduction of area of 28, 23 and 16%, respectively; corresponding figures after conventional treatment were:
 UDC: 669.14-157.9

PROVORNOV, Sergey Mikhaylovich; GOLOD, Iosif Semenovich; BERSHTEYN, Naum Davydovich. Prinimal uchastiye KARIPIDI, S.D., kand. tekhn. nauk, starshiy nauchnyy sotr.; EYSYMONT, L., red.; PEREGUDOVA, M., tekhn. red.

[Equipment for motion-picture film printing] Kino-kopiroval'-naia apparatura. Moskva, Iskusstvo, 1962. 314 p.

(MIRA 15:10)

(Motion-picture photography--Equipment and supplies)

ISOFIDI, I.Ye.; IVANOVA, Zh.P.; ZHEBRAC, V.D.; BERSHTEYN, N.V.

Operation of an electric desalter on a nonionogenic oxyethylene fatty acid demulsifier. Nefteper. i neftekhim. no.5:3-5 '64.

(MIRA 17:8)

1. Salavatskiy kombinat i Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gazov i polucheniyu iskusstvennogo zhidkogo topliva.

L 9998-63

EEC-2/EEB-2/EEB-2/BDS--AFFTC/ASD/ESD-3--P1-4/Pn-4

ACCESSION NR: AP3000531

S/0106/63/000/005/0015/0023

AUTHOR: Bershteyn, P. V.

TITLE: Filtration of white noise in precision frequency receivers

SOURCE: Elektrosvyaz', no. 5, 1963, 15-23

TOPIC TAGS: precision frequency receiver, noise filters, phase automatic frequency control

ABSTRACT: In a study of white noise filtration, filter bandwidth expressions are derived for precision frequency receivers having variations of phase automatic frequency control (PAFC) which use a filter either before or after the phase detector. An example is given in which the maximum permissible drift of the center filter frequency is assumed to be 0.003 cps. Then the minimum achievable noise bandwidth would be 1) 0.0188 cps for a receiver without PAFC, 2) 0.0094 cps for a receiver with PAFC using a cosine characteristic phase detector followed by a type 1/1 filter, and 3) approximately 0.004 cps for a receiver using a triangular-characteristic phase detector followed by

Card 1/2

L 9998-63

ACCESSION NR: AP3000531

0

a type 1/2 filter. A variation which employs synchrophased filters ahead of the phase detector as part of the PAFC system would have a greater pull-in range when using the parameters of the above example. This would permit reduction of the hold-in range and a corresponding reduction in noise bandwidth. Orig. art. has: 8 figures, 2 tables, and 39 formulas.

ASSOCIATION: none

SUBMITTED: 03Oct62

DATE ACQ: 03Jun63

ENCL: 00

SUB CODE: 00

NO REF SOV: 005

OTHER: 000

bm/ss
Card 2/2

BERSHTEYN, F.Ya.

Solution of Lamb's problem for an anisotropic medium. Izv.

AN SSSR, Fiz. zem. no.6:53-55 '65.

(MIRA 18:7)

1. Khar'kovskiy inzhenerno-stroitel'nyy institut.

BERSHTEYN, P.Ya. (Kharkov)

Torsion waves in an anisotropic nonuniform cylindrical rod.
Inzh. zhur. 5 no.3:574-574 '65. (MIRA 18:7)

BERSHTEYN, P. Ya.

Dynamic deformations of cylindrical springs. Prikl.mekh. 6
no.4:448-451 '60. (MIRA 13:11)

1. Srednyaya shkola No.4, Khar'kov.
(Springs (Mechanism))

BERSHTEYN, P.Ya.

Reflection of waves from the boundary of an anisotropic half-space.
Izv. AN SSSR. Ser. geofiz. no.10:1525-1526 0 '61. (MIRA 14:9)
(Elastic waves)

BERSHTEYN, P.Ya.

Solution of Lamb's problem for media with weak anisotropy.
Izv. AN SSSR. Ser. geofiz. no.3:385-388 Mr '62. (MIRA 15:2)
(Elasticity)

BERSHTEYN, P. Ya., prepodavatel'

Infinite hollow anisotropic cylinder subjected to external
and internal uniform dynamic pressures. Izv. vys. ucheb. zav.;
mashinostr. no. 7:61-67 '62. (MIRA 16:1)

1. Khar'kovskiy politekhnicheskiy institut.

(Cylinders)

PRITYKIN, D.P.; BERSHTEYN, R.S.

Replacing parts of a multicyclone during the operation of a
sintering machine. Stal' 23 no.2:115-116 F '63. (MIRA 16:2)
(Separators (Machines)--Maintenance and repair)
(Sintering)

SUPRUNENKO, R.S.; PRITYKIN, D.P.; NOVIKOV, B.G.; KISSIN, D.A.;
BERSHTEYN, R.S.; SHAHLIYENKO, I.D.

Scrubbing of sintering furnace gas. Metallurg 9 no.10:14-15
0 '64 (MIRA 18:1)

1. Zavod "Zaporozhstal'".

SYROMYASSKIY, V.A.; NOVIKOV, B.G.; BERSHTEYN, R.S.; PRITYKIN, D.P.;
OKATYY, K.A.

Automatic control of the return cooling cycle in a sintering
plant. Metallurg 10 no.6:6-8 Je '65. (MIRA 18:6)

1. Zavod "Zaporozhstal".

KIESH, D.A.; BERSHTEYN, R.S.; NOVIKOV, B.G.

Ways of improving the quality of sinter. Metallurg 13 no.7:
13-16 J1 '65. (MIRA 18:7)

1. Zavod "Zaporozhstal".

BYTKIN, V.N., inzh.; BERSHTEYN, R.S., inzh.; KISSIN, D.A., kand. tekhn. nauk

Ways of improving the reducibility of fluxed sinter. Stal' 25
no.7:577-581 J1 '65. (MIRA 18:7)

1. Zavod "Zaporozhstal'".

BERSHTEYN, S.

USSR/ Electronics - Testing instruments

Card 1/1 Pub. 89 - 12/32

Authors *Bershteyn, S.*

Title *Testing instrument used by line-supervisors*

Periodical *Radio 2, page 19, Feb 1955*

Abstract *A description is given of a combination volt-ohm-microammeter used by line-supervisors for measuring voltage and the line insulation resistance. Drawing and diagram depicting the above component are presented, and checking and adjusting methods explained. Drawing; circuit diagram.*

Institution:

Submitted:

GUREVICH, M.I. [Hurevych, M.I.]; BERSHTEYN, S.A.

Mechanism of the biological action of ultrasonics. Fiziol.zhur.
[Ukr.] 10 no.4:508-515 J1-Ag '64.

(MIRA 18:11)

1. Institut fiziologii im. Bogomol'tsa AN UkrSSR, Kiyev.

27.1220

39857

S/238/62/008/002/003/004

1015/1215

AUTHOR: Bershteyn, S. A.

TITLE: Effect of ultrasonic radiation on the resistance of erythrocytes to hemolysis

PERIODICAL: Fiziologichnyy zhurnal, v. 8, no. 2, 1962, 238-242

TEXT: The resistance of erythrocytes to ultrasonic radiation was determined by the photoelectric method of I. A. Terekov and I. I. Gitel'zon. A suspension of 3 cm³ of erythrocytes was subjected to ultrasonic treatment with a VEM apparatus at a frequency of 800 kc/sec. Hemolysis was preceded by other, apparently structural changes in the erythrocytes, which resulted in their decreased resistance. The decrease in resistance was found to be dependent on the intensity and duration of the ultrasonic vibrations. There are 3 figures

ASSOCIATION: Laboratoriya biofizyky Institutu fiziologii im. O. O. Bogomol'tsya Akademii nauk URSS (Laboratory of Biophysics, Institute of Physiology im. O. O. Bogomolets Academy of Sciences UKrSSR) Kiev

SUBMITTED: May 29, 1961

Card 1/1

BERSHTEYN, S.A.

Change in the hemolytic resistance of erythrocytes under the influence of ultrasonic radiation. Fiziol. zhur. [Ukr] 8 no.2:238-242 Mr-Apr '62.
(MIRA 15:5)

1. Laboratory of Biophysics of the A.A.Bogomoletz Institute of Physiology of the Academy of Sciences of the Ukrainian S.S.R., Kiev.
(HEMOLYSIS AND HEMOLYSINS) (ULTRASONIC WAVES—PHYSIOLOGICAL EFFECT)

BERSHTEYN, S.A.; YEVDOKIMOV, I.R. [IEvdokymov, I.R.]

Device for measuring the erythrocyte diameter by light diffraction.
Fiziol. zhur [Ukr] 8 no.4:553-556 J1-Ag '62. (MIRA 18:4)

1. Laboratoriya tkaninnoi dozimetrii Institutu fiziologii im. O.O.
Bogomol'tsya AN UkrSSR, Kiyv.

BARABOY, V.A.; BERSHTEYN, S.A.

Polarographic activity of serum proteins in acute radiation sickness
and the preventive administration of propyl gallate. Ukr.biochim.
zhur. 34 no.1:32-39 '62. (MIRA 17:5)

1. Laboratory of biophysics of the Institute of Physiology of the
Academy of Sciences of the Ukrainian S.S.R., Kiev.

L 18825-63

BDS

ACCESSION NR: AP3001517

S/0238/63/009/003/0369/0376

AUTHOR: Bershteyn, S. A.

TITLE: Effect of ultrasound on certain morphological and physicochemical characteristics of the peripheral blood

SOURCE: Fiziologichnyy zhurnal, v. 9, no. 3, 1963, 369-376

TOPIC TAGS: Ultrasound, erythrocyte fragility, hemogram

ABSTRACT: Author reviews some controversial data in published studies on the subject of the effect of the ultrasound on erythrocytes and other blood cells of the red series in vitro and in vivo. His conclusion from his own previous studies was that, contrary to findings of others, ultrasound does affect erythrocytes not only in vitro, but in vivo as well. He now extended his previous studies using 7 series of 10 rabbits each, exposing them to ultrasound pulses of 800 kilocycles from VEM and UTP-1 ultrasound apparatus (for up to 15 seconds at 0.3 to 3 watts per square centimeter over a vaseline-coupled pulser

Card 1/2

L 18825-63

ACCESSION NR: AP3001517

to shaved skin. He then determined photoelectrically the erythrocyte hemolysis kinetics at 1, 2, 4, 6, 10 and 15 hours later, while other hemogram parameters were studied concurrently. Hemogram changes roughly paralleled the intensity of the impulse but varied in degree, peak time and duration. Author concludes that ultrasound affects not only the circulating erythrocytes and their immature predecessors, but also the corresponding hemopoietic areas as well as the erythrocyte scavenger tissues. Orig. art. has: 3 figures.

ASSOCIATION: Laboratoriya tkany*nnoyi dozy*metriyi Insty*tutu fiziologiyi im. O. O. Bogomol'tsya Adademiya nauk UkrSSR, Ky*yiv (Tissue Dosimetry Laboratory of the Physiology Institute of Bogomolets, Kiev)

SUBMITTED: 00

DATE ACQ: 21Jun63

ENCL: 00

SUB CODE: AM

NO REF SOV: 009

OTHER: 009

Card 2/2

ACC NR: AT6036545

SOURCE CODE: UR/0000/66/000/000/0141/0142

AUTHOR: Gurevich, M. I.; Bershteyn, S. A.

ORG: none

TITLE: The role of changes in tissue partial oxygen pressure in the regulation of local blood circulation during acute hypoxia [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24 to 27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 141-142

TOPIC TAGS: hypoxia, circulatory system, oxygen consumption, blood pressure

ABSTRACT: A study was made of the character and direction of local vascular reactions as mechanisms of circulatory regulation during hypoxia. Acute hypoxia was induced in chloralose-nembutal anesthetized cats by making them breathe oxygen-poor gas mixtures. Changes in pO_2 and tissue blood flow were determined in upper hind leg muscles, abdominal epidermis, and the parietal region of the cerebral cortex. Blood pressure was measured on the femoral artery. Tissue pO_2 was measured by the polarographic method. Tissue blood flow was recorded thermoelectrically. A special device was used for synchronous recording of the dynamics of changes in tissue blood flow, tissue pO_2 , and systemic arterial pressure.

Cord 1/2

ACC NR: AT6036545

It was found that during acute hypoxia, tissue oxygen supply is not uniform. The cerebral cortex receives the best oxygen supply at the expense of skeletal muscle, skin, and some other organs, as a result of a redistribution of blood accomplished by a complex of changes in peripheral vascular tonus.

Changes in local vascular resistance and adequate systemic arterial pressure provide a blood flow pattern satisfying tissue oxygen requirements.

The mechanisms of local vascular tonus regulation in hypoxia are not yet understood and require further study. [W.A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 2/2

L 04583-67 EWT(1) SCTB DD

ACC NR: AP6033152

SOURCE CODE: UR/0238/66/012/005/0649/0654

AUTHOR: Bershteyn, S. A. 16 B

ORG: Division of Circulatory Physiology, Institute of Physiology im. O. O. Bohomolets, Academy of Sciences UkrSSR, Kiev (Viddil fiziolohiyi krovoobihu Instytutu fiziolohiyi Akademiyi nauk UkrSSR)

TITLE: Changes in chief hemodynamic indices in cats under conditions of insufficient oxygen in inspired air

SOURCE: Fiziolohichnyy zhurnal, v. 12, no. 5, 1966, 649-654

TOPIC TAGS: animal physiology, cardiovascular system, hypoxia, gas environment, respiratory physiology, cat

ABSTRACT: Changes in cardiac ejection, general peripheral resistance, and systemic arterial pressure were studied in cats breathing nitrogen-oxygen mixtures containing 7.5% or 6% oxygen. Experimental animals were under chloral-Nembutal anesthesia. Hemodynamic indices were determined using the method of "thermodilution," with a sensor capable of measuring intravascular temperature with an accuracy of 0.05C inserted through the carotid artery into the lumen of the aorta. Experiments showed that decreasing the oxygen content in inspired air causes pronounced hypertension, due to an increased rate of cardiac ejection combined with heightened general peripheral resistance. Cardiac ejection intensifies because of increase in the systolic

Card 1/2

L 04583-67

ACC NR: AP6033152

index. As the oxygen deficiency in inspired air increases, systemic arterial pressure is maintained at a corresponding level chiefly by increase in cardiac ejection. Orig. art. has: 2 figures and 2 tables.

SUB CODE: 06/ SUBM DATE: none/ ORIG REF: 008/ OTH REF: 014/ ATD PRESS: 5100.

Cord 2/2 vmb

GAVRILOVA, M.A., doktor tekhn.nauk; ARTOBOLVSKIY, S.I., doktor tekhn. nauk; BERSHTEYN, S.I., kand. tekhn. nauk; BOLGAKOV, A.A., kand. tekhn. nauk; LERNER, A.Ya., doktor tekhn. nauk; MEYEROV, M.V., doktor tekhn. nauk; SUKHOV, N.K., doktor tekhn. nauk; FEL'DBAUM, A.A., doktor tekhn. nauk; FILIPPOVICH, B.I., doktor tekhn. nauk; KHAMOI, A.V., doktor tekhn. nauk; SHORYGIN, A.B., doktor tekhn. nauk

[Terminology on the basic concepts of automatic control] Terminologiya osnovnykh poniatii avtomatiki; doklad. Moskva, 1960. 31 p. (International Federation of Automatic Control, ost International Congress, Moscow, 1960. Doklady, no.232) (MIRA 14:8)

1. Natsional'nyy komitet po avtomaticheskemu upravleniyu. Nauchno-tekhnicheskii komitet terminologii. 2. Nauchno-tekhnicheskii komitet terminologii Natsional'nogo komiteta SSSR po avtomaticheskemu upravleniyu (for all).

(Automatic control—Terminology)

phthalate group (V) contents determined by alkaline saponification.
mixed esters are obtained with a substantially different content of
V. Esters of phthalic acid and V are also known.

91-93, 4-7 and 3-8 kg./mm.; relative elongation, 16-2, 20-0 and
25-25, and water absorption of 4-70, 3-25 and 2-18 wt. % after
24 hr. with water of 100°C.

HERSHTEYN, V. Vinshener.

Foreign practices for painting the submarine part of a ship's hull.
Mor.flot 16 no.11:28-30 N°56. (MLRA 10:1)

1. Tsentral'nyy nauchno-issledovatel'skiy institut morskogo flota.
(Ships—Painting)

... BERSHTEYN, V.A.

USSR /Chemical Technology. Chemical Products
and Their Application
Corrosion. Protection from Corrosion.

H-4

Abs Jour: Referat Zhur - Khimiya, No 1, 1958, 1615

Author : Zobachev Yu., Bershteyn V., Kuznetsov V.

Title : Means of Protecting Inside Surfaces of Tankers
from Corrosion.

Orig Pub: Morsk. flot, 1957, No 4, 15-18

Abstract: A presentation of the results of investigations
of the causes of corrosion damage (CD) to in-
side surfaces and structures of a large number
of foreign tankers. The average magnitude of
CD averages 0.28 mm/year during the first 9
years of operation, and 0.38 mm/year during the

Card 1/5

USSR /Chemical Technology. Chemical Products
and Their Application
Corrosion. Protection from Corrosion.

H-4

Abs Jour: Referat Zhur - Khimiya, No 1, 1958, 1615

subsequent years. During transportation of dark grades of petroleum products the rate of corrosion of the ships is approximately 3 times less than in shipping of light petroleum products. Procedures for the protection of the tankers from corrosion are listed. Tanker structures made from clad stainless steel. The vinyl resin base coatings can be utilized over prolonged periods at temperatures not exceeding 50-60°, or on brief exposures to temperatures of 85-95°. Also effective is a coating of Saran, which is sometimes used with an aluminum powder filler. To enhance the quality of the protective coating use is made of etching primers containing phos-

Card 2/5

USSR /Chemical Technology. Chemical Products
and Their Application
Corrosion. Protection from Corrosion.

H-4

Abs Jour: Referat Zhur - Khimiya, No 1, 1958, 1615

phoric acid. Good results were also obtained with coatings based on epoxy-resins, ethynol- and neoprene lacquers. Other materials that can be used to protect inside surfaces of tankers include coatings having a base of furan- and phenol resins, thiokol, polyamides, etc. On a number of tankers corrosion is controlled by drying the air inside the tanker by means of a "Cargocare" unit. Corrosion inhibitors, which are added to the ballast water, are not utilized at the present time for economical reasons. Among the corrosion inhibiting agents that are added to the cargo the best results were obtained

Card 3/5

USSR /Chemical Technology. Chemical Products
and Their Application
Corrosion. Protection from Corrosion.

H-4

Abs Jour: Referat Zhur - Khimiya, No 1, 1958, 1615

with "Santolen S". In the washing of surfaces of empty tankers use has been made of a 5% solution of Na_2SiO_3 in fresh water containing 1% (by weight) of NaOH . In the United States and England extensive use is made of cathodic protection, by means of Mg-anodes, for the corrosion control in ballast carrying tankers. A6Z3 alloy has been used for the anodes. In England a 2-step system of protection has been used, in which, during the initial stage, the primary anodes, weighing 60-80 kg each and installed inside the tanker, are supplemented by temporary, additional, anodes of circular

Card 4/5

USSR /Chemical Technology. Chemical Products
and Their Application
Corrosion. Protection from Corrosion.

H-4

Abs Jour: Referat Zhur - Khimiya, No 1, 1958, 1615

shape, by means of which a rapid formation
of a protective calcareous layer on the metal,
is effected.

Card 5/5

БЕРШТЕЙН, Владимир Абрамович

AGRANAT, Bentsiyon L'vovich.; BERSHTEYN, Vladimir Abramovich.; GUREVICH,
Ye.S., spetsred.; KUZNETSOV, A.D., red. izd-va.; KOTLYAKOVA,
O.I., tekhn. red.

[New paints and varnishes for ships] Novye lakokrasochnye materialy
dlya okraski sudov. Leningrad, Izd-vo "Morskoi transport," 1958. 89 p.
(Ships--Painting)
(Paint)

SOV/81-59-12-42732

Translation from: Referativnyi zhurnal. Khimiya, 1959, Nr 12, pp 273-274 (USSR)

AUTHOR: Bershteyn, V.A.

TITLE: The Protection of Sea Ship Hulls Against Corrosion by Non-Metal Coatings

PERIODICAL: V sb. Zashchita morsk. sudov ot korrozii. Moscow. "Morsk. transport", 1958, pp 58-62

ABSTRACT: The studies of the recent years have been described which have been carried out by TsNIIMF on protective coatings. In the natural tests two systems were used: 1) ethinol on iron minium (EKZh-40) 4 layers, NIVK-2 paint 2 layers; 2) based on vinyl compounds: primer VL-02 1 layer, the anticorrosion composition KhS-78 3 layers, the not-overgrowing composition KhS-79 2 layers. Both these systems have shown the considerable advantages of these coatings against the former ones as to their stability as well as the possibility of application under unfavorable meteorological conditions. Ethinol coatings are insufficiently stable during storing, have an unpleasant smell and are unstable to the action of sun

Card 1/2

SOV/81-59-12-42732

The Protection of Sea Ship Hulls Against Corrosion by Non-Metal Coatings

rays, but due to their cheapness they are used on a broad scale in ship yards. Vinyl coatings have also been tested on ships. The absence of industrial production and their high cost prevent their broad application. For the protection of the inner surface of tankers/against corrosion TsNIIMF has developed benzene-petroleum-resistant coatings of cold drying based on epoxide, ethinol, polyurethane, phenolformaldehyde and vinyl materials. For natural tests on tankers four systems have been chosen based on ethinol, copolymers of chloro-vinyl with vinylidenechloride, bakelite varnish with aluminum powder and epoxide resins. For the protection of reservoirs and sections of drinking and feed water two systems have been proposed based on the copolymer of chlorovinyl with vinylidenechloride: 1) primer KhS-04 1 layer, enamel VKhE-4023 3 layers; 2) primer KhS-04 1 layer, varnish VKhL-400 (KhS-74) with aluminum powder 3 layers.

T. Fabrikant

Card 2/2

BERSHTEYN, V.

BERSHTEYN, V., inzh.; YELIN, I., inzh.; KOGAN, N., inzh.

~~Feasibility of using epoxyresins for ship repairs.~~ Mor. flot 18 no.1:
10-12 Ja '58. (MIRA 11:1)

1. Tsentral'nyy nauchno-issledovatel'skiy institut morskogo flota.
(Ships, Maintenance and repair)
(Gums and resins, Synthetic)

BERSHTEYN, V.A.; KRASIL'SHCHIKOVA, B.L.; MATVEYEV, V.M.; RYT, E.Sh.;
~~BERSHTEYN, G.M.~~

Paints used for protecting the underwater portion of seagoing
ships' hulls from corrosion and fouling. Trudy TSNIIMF no.25:
31-72 '59. (MIRA 12:8)

(Paints)

(Ships--Painting)

BERSHTEYN, V.A., inzh.; KRASIL'SHCHIKOVA, B.L., inzh.

Nonmetallic coatings used for protecting oil-tanker tanks from
corrosion. Sudostroenie 25 no.3:38-42 Mr '59.

(MIRA 12:5)

(Protective coatings) (Tank vessels)

S/081/61/000/020/060/089
B102/B147

AUTHORS: Bershteyn, V. A., Yelin, I. A., Kolenkina, T. A.

TITLE: Epoxy-plastic coatings for corrosion protection of ship structures

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 20, 1961, 263 - 264, abstract 20I195 (Sudostroyeniye, no. 5, 1961, 41 - 45)

TEXT: In order to protect structural elements in shipbuilding against corrosion, reinforced epoxy coatings with low-temperature (15 - 25°C) solidification were proposed and tested under natural conditions. The coatings were found to have good anticorrosive, dielectrical, and mechanical properties. [Abstracter's note: Complete translation.] ✓

Card 1/1

BERSHTEYN, V.A.

Some results of the testing of epoxide resins and their utilization
in repair work. Plast.massy no.6:34-40 '61. (MIRA 14:5)
(Epoxy resins)

BERSHTEYN, V.A., inzh.; YELIN, I.A., inzh.; KOLENKINA, T.A., inzh.

- Epoxy coatings for the protection of structural ship elements
against corrosion. Sudostroenie 27 no.5:41-45 My '61.

(MIRA 14:6)

(Ships--Corrosion)
(Epoxy resins)

~~BERSHTEYN, V.A., inzh.~~; KASHAYEV, I.N., inzh.; RYT, E.Sh., inzh.; TSODIKOVA,
S.T., inzh.; Primali uchastiye: KRASIL'SHCHIKOVA, B.L., inzh.;
KONONOVA, N.I., inzh.; MATVEYEV, V.M., inzh.

Results of testing synthetic antifouling paints for seagoing
ships. Sudostroenie 28 no.4:41-44 Ap '62. (MIRA 15:4)
(Fouling of ship bottoms) (Ships--Painting)

S/032/62/028/004/013/026
B105/B101

AUTHORS: Glikman, L. A., and Bershteyn, V. A.

TITLE: Examinations of the long service life and creep during pure bending of glass plastics

PERIODICAL: Zavodskaya laboratoriya, v. 28, no. 4, 1962, 474 - 480

TEXT: Bending tests were conducted to study differences in the behavior of glass reinforced plastics subjected to load, which were caused by various structural and design factors, and also by aggressive media and elevated temperatures (30 - 90°C). Pure bending tests are recommended for glass reinforced plastics. Extrapolation for 100.000 hrs was conducted on the basis of 1000 hr-tests owing to the linear dependences of σ on $\log \tau$, and $\log f_{red}$ on $\log \tau$, respectively. $f_{red} = (f_{total} - f_0)h/6$ is the reduced deflection, with f_0 being the initial deflection after 20 - 40 sec and h being the thickness. The correctness of extrapolation still requires experimental checking. Correlation equations are given for the flexing life of glass reinforced plastics: satin glass fabric 8/3 with lubricant

Card 1/2

Examinations of the long service...

S/032/62/028/004/013/026
B105/B101

((ACTT(5)-C₂) (ASTT(b)-S₂) fabric) + ПН-1 (PN-1) resin (polymaleic ester)
in air : $\log \tau = 6.9 - 0.29 \sigma$ (kg/mm²); ditto in sea water: $\log \tau = 5.71$
- 0.43σ ; 8/3 fabric prepared with 5% ГВС-9 (GVS-9) organosilicon
composition + PN-1 resin in air: $\log \tau = 9.37 - 0.26 \sigma$; in sea water:
 $\log \tau = 8.23 - 0.28 \sigma$. 8/3 fabric with GVS-9 and ПН-3 (PN-3) resin
(polymaleic ester) in air: $\log \tau = 9.94 - 0.32 \sigma$; in sea water: $\log \tau = 9.34$
- 0.36σ . 8/3 fabric with GVS-9 and binder 911 (polyacrylic ester) in air:
 $\log \tau = 14.55 - 0.46 \sigma$; in sea water: $\log \tau = 7.36 - 0.31 \sigma$. Creep tests
proved glass reinforced polyester resins to be anisotropic; f_{red} was
15 times larger in tests at an angle of 45°. There are 6 figures and 1
table.

Card 2/2

L 19490-63

EPR/ENP(j)/EPF(c)/EWT(m)/BDS/ES(s)-2 AFFTC/ASD/SSD

Ps-4/Pr-4/Pc-4/Pt-4

RM/WM/MAY

S/0181/63/005/008/2270/2277

ACCESSION NR: AP3005337

AUTHORS: Bershteyn, V. A.; Glikman, L. A.

TITLE: Time dependence of strength in heterogeneous materials

SOURCE: Fizika tverdogo tela, v. 5, no. 8, 1963, 2270-2277

TOPIC TAGS: time dependence, strength, heterogeneity, fiberglass, durability, sea water, fresh water, polymer, glassy state, elastic state, anisotropy, stress state

ABSTRACT: Systematic study of ¹⁵strength in ¹⁵fiberglass from ¹⁵cold casting of 16 different structures has shown that an exponential dependence of durability on stress (on the order of $10^5 - 10^6$ multiples of time--up to $10^3 - 10^4$ hours) is fundamentally valid for two types of stress state (pure bending and tension) in air, sea water, and fresh water. Only individual variations were observed, and some of these were connected with instability of the properties of the plastic with time. On two types of fiberglass, it was shown that the exponential function of Zhurkov, $\tau = \tau_0 \exp(-\frac{U_0 - Y\sigma}{RT})$, is valid until the temperature reaches the

Card 1/2

L 19490-63

ACCESSION NR: AP3005337

2
point of vitrification of the binding medium. The value of τ_0 (initial life or durability) has proved to be, as for homogeneous bodies, equal to the vibration period of the atoms (10^{-11} - 10^{-14} sec). The indicated equation is considered inapplicable with unchanging coefficients for polymers if the temperature interval embraces glassy and highly elastic states. It is shown that the effect of the time factor on strength of fiberglass varies between rather wide limits, depending on such factors as type of glassy fibers and nature of their surface treatment, composition of the binding medium, anisotropy, and type of stress state. A distinctive effect of the indicated factors is demonstrated for an aggressive environment (sea water or fresh water). Orig. art. has: 6 figures.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut Morskogo flota, Leningrad (Central Scientific Research Institute for the Merchant Marine)

SUBMITTED: 29Mar63

DATE ACQ: 06Sep63

ENCL: 00

SUB CODE: PH

NO REF SOV: 011

OTHER: 002

Card 2/2

BERSHTEYN, V.A.; GLIKMAN, L.A.

Effect of thermochemical treatment of glass fibers on creep
of polyester glass reinforced plastics in the air and in
sea water. Plast. massy no.11:36-41 '63. (MIRA 16:12)

BERSHTEYN, V.A.; KRASIL'SHCHIKOVA, B.L.; NIKONOVA, S.N.; SHABADASH, A.N.

Mechanism of the effect of the thermochemical treatment of glass
fibers on the strength of polyester glass plastics. Plast.massy
no.10:30-35 '63. (MIRA 16:10)

BERSHTEYN, V.A., inzh.; Prinimali uchastiye: KRASIL'SHCHIKOVA, B.L.,
inzh.; NOVIKOVA, Ye.V., inzh.; LAVROV, A.V., inzh.; GRUKOV, D.I.,
inzh.; KITAYCHIK, V.A., inzh.; GLIKMAN, L.A., prof., doktor tekhn.
nauk; SUPRUN, L.A., kand.tekhn.nauk, nauchnyy red.; STRUMTE, P.I.,
kand.tekhn.nauk, otv.red.

[Stress-rupture strength and creep of glass-reinforced plastics
for use as shipbuilding material.] Dlitel'naya prochnost' i
polzuchest' stekloplastikov kak sudostroitel'nykh materialov.
Leningrad, Izd-vo "Morskoi transport," 1963. 92 p. (Leningrad.
TSentral'nyi nauchno-issledovatel'skii institut morskogo flota.
Trudy, no. 53) (MIRA 17:6)

1. Sotrudniki TSentral'nogo nauchno-issledovatel'skogo
kotloturbinного instituta imeni Polzunova (for Grekov, Kitaychik).

BERSHTEYN, V.A.; GLIKMAN, L.A.

Effect of the type of the stressed state on the time dependence
of the strength of polyester glass reinforced plastics. Zav.
lab. 29 no.10:1230-1235 '63. (MIRA 16:12)

1. Tsentral'nyy nauchno-issledovatel'skiy institut morskogo flota.

MODTC TAGS: polyester plastic, glass reinforced plastic, glass fiber cloth strength

s/0032/64/030/002/0215/0218

ACCESSION NR: AP4013310

AUTHORS: Bershteyn, V. A.; Glikman, L. A.

TITLE: Accelerated method for determining long term strength of fiber glass

SOURCE: Zavodskaya laboratoriya, v. 30, no. 2, 1964, 215-218

TOPIC TAGS: long term strength, fiber glass, rupture strength, polyester, satin fiber

ABSTRACT: Experiments were performed to determine long-term rupture strength of fiber glass as predicted by the Larson-Miller, Goldfein parametric expressions

$$P = T(C + \lg \tau)$$

$$P = \frac{T_0 T}{T_0 - T}(C + \lg \tau)$$

where P - parameter, function of stress only, C - constant equal to 20, T_0 - melting temperature, T - test temperature, τ - longevity, (hrs). Three cold polyester fiber glass specimens were used with PN-1, PN-3 bonds and satin fiber ASTT (b)-C2-0, and 911MS bonds with ASTT(b)-C2-V fiber. The tests were purely flexural at various temperatures (293-313K). The results showed that at C = 20

Card : 1/2

ACCESSION NR: AP4013310

the parameter P does not remain constant at $\sigma = \text{const}$ but varies with temperature. Moreover, it was shown that C varies from one fiber glass to another and even for each material. It is a linear function of σ . This is shown to reduce considerably the expected long-term rupture strength of fiber glass. Orig. art. has: 5 formulas and 2 figures.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut morskogo flota
(Central Naval Scientific Research Institute)

SUBMITTED: 00

DATE ACQ: 26Feb64

ENCL: 00

SUB CODE: MT

NO REF SOV: 012

OTHER: 006

Card 2/2

L 20381-66 EWT(m)/EWP(j)/T/ETC(m)-6 WW/RM

ACC NR: AP6006547

(A)

SOURCE CODE: UR/0191/65/000/011/0057/0061

AUTHORS: Bershteyn, V. A.; Petrova, L. V.

ORG: none

TITLE: Evaluation of various methods for the introduction of fillers into fiber-glass plastic in terms of their long-term strength properties

SOURCE: Plasticheskiye massy, no. 11, 1965, 57-61

TOPIC TAGS: filler, solid mechanical property, plastic strength, fiber glass, epoxy plastic, laminated plastic, phenolic plastic/ AGM-3 filler, AGM-9 filler, STER epoxy plastic

ABSTRACT: This investigation was conducted to evaluate three different methods for the introduction of fillers into fiber-glass plastics, in terms of their long-term properties, viz. time dependence of strength and creep. The methods of filler addition studied were: a) the cloth was treated with amine-containing fillers AGM-3 or AGM-9; b) the glass fibers were covered with a usual paraffin emulsion or special filler AGM-3 (No. 652); c) 1% of ES compound, containing an epoxy group, was added to the binder. The time dependence of strength and creep of the fiber-glass plastics prepared by the three different methods was tested in air and

Card 1/3

UDC: 678.06-419:677.521:677.86.01:539.4

L 20381-66

ACC NR: AP6006547

in water. The experimental procedure followed here is described by L. A. Glikman and V. A. Bershteyn (Zav. lab., No. 4, 474, 1962), and the results are presented in graphs and tables (see Fig. 1). The conclusion reached is that the most

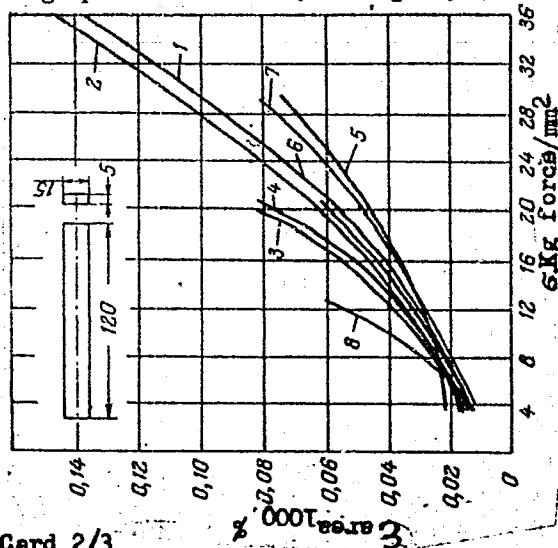


Fig. 1. Dependence of creep deformation after 1000 hours of epoxy-phenolic fiber-glass plastics of type STER on the applied stress. 1, 2 - glass cloth with lubricant 652; air and water respectively; 3, 4 - glass cloth treated with AGM-3; air and water respectively; 5, 6 - glass cloth thermo-treated, 1% ES added to binder; air and water respectively; 7, 8 - glass cloth paraffin emulsion lubricant; air and water respectively.

L 20381-66
ACC NR: AP6006547

2
sensitive method for the evaluation of the technique of adding fillers to fiber-glass plastics is a test of their strength in water. The introduction of fillers into the epoxy-phenolic plastic of type STER by adding the latter to the lubricant was found to have definite advantages over other methods. It is suggested that the connection between the method of filler introduction and the long-term strength of plastics in water is to be found in the formation of bonds between the fiber-glass layers which are resistant to hydrolysis. The work was carried out under the supervision of N. Ya. Voytsekhovich. Orig. art. has: 1 table and 3 graphs.

SUB CODE: 11/

SUBM DATE: none/

ORIG REF: 013/

OTH REF: 010

Card 3/3 vmb

BERSHTEYN, V. O. (Engineer), POPLAVKIN, D. L. (Engineer, Riga), SHKURATOVSKY, G. D. (Engineer, Tallin), SAPIRO, L. S. (Candidate of Technical Sciences, Donetsk), and MAZUS, A. A. (Engineer, Tallin)

"The production of welding materials from local raw materials, improvement of power sources, and personnel training".

Report presented at the 3rd Baltic Conference on Welding, convened by the Sovnarkhozes of the Lithuanian SSR, Latvian SSR, and Estonian SSR, 8-9 April 1964, Vilnyus.

[Avtomaticeskaya SVARKA, No. 7, 1964 p. 95)

1ST AND 2ND ORDERS																									
PROCESSING AND PROPERTIES UNIT													COMPARISON TABLE												
BERSHTEYN, Ya. A.													4												
<p>Ways of reducing the specific consumption of electrical energy in the electrolytic production of aluminum. G. I. Khvorovskii and Ya. A. Bershtein. <i>Legko Met.</i> 6, No. 11-23 (1937); <i>Chem. Zvez.</i> 1938, 1, 3533. — Working with high c. d. (0.9 amp./sq. cm.) with the electrodes close together (3-3.5 cm.) reduces the consumption of elec. energy about 8%. A further reduction up to 12% is effected by improving the connections by which the current enters the electrolytes and reducing the resistance of the electrode contacts. Reducing the heat loss from the bath within reasonable limits so that the cond. of the bath is not too much reduced by reduction of the c. d. effects a further saving.</p> <p>M. G. Moore</p>																									
<p>ASM 15-A METALLURGICAL LITERATURE CLASSIFICATION</p>																									

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 3, p 81 (USSR) SOV/137-59-3-5506

AUTHORS: Bershteyn, Ya. A., Verigin, V. N.

TITLE: Electrothermics in the Aluminum Industry (Elektrotermiya v alyuminiyevoy promyshlennosti)

PERIODICAL: V sb.: Legkiye metally. Nr 4. Leningrad, 1957, pp 69-75

ABSTRACT: Immediate production of pure Al by direct reduction of Al_2O_3 with carbon in an ore-reduction furnace is impossible. Hence, the process is carried out in two stages: In the first stage of the process the smelting of electrothermal Si-Al alloy (up to 70% Al) is carried out. In the second stage the primary alloy obtained is reprocessed into Al alloys for the preparation of structural Al alloys or technically pure Al. The effectiveness of the process to a great extent depends on the utilization of high-silicon Al alloys (siliceous residues), which inevitably form as byproducts in the processing of primary Si-Al alloys into Al and its alloys. Calculations show that preparation of Al by the electrothermal method is most effective when the primary Si-Al alloys obtained are reprocessed into various casting alloys which usually contain Si as a necessary component. In the

Card 1/2

SOV/137-59-3-5506

Electrothermics in the Aluminum Industry

preparation of Silumin alloy and technically pure Al from primary electrothermal alloys a decrease in the specific consumption of energy by 87 - 93%, in specific capital expenses by 67 - 73%, and in cost by 76 - 85%, with an increase in labor productivity of up to 141 - 109%, are expected in comparison with the existing methods.

I. G.

Card 2/2

137-58-6-11928

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 107 (USSR)

AUTHOR: Bershteyn, Ya. A.

TITLE: Proposed Designs for New Aluminum Plants (Novyye tekhnicheskiye resheniya pri proyektirovanii alyuminiyevykh zavodov)

PERIODICAL: Sb. materialov tekhn. inform. Gos. in-t po proyektir. alyumin., magniyevykh i elektrodn. z-dov, 1957, Nr 1, pp 4-12

ABSTRACT: Bibliographic entry. Ref. RzhMet, 1958, Nr 6, abstract 11927

1. Aluminum--Production 2. Industrial plants--Design

Card 1/1

AUTHOR: Bershteyn, Ya.A.

136-5-3/14

TITLE: Development of aluminium production technology in the sixth Five Year Period. (Razvitie tekhniki proizvodstva alyuminiya v shestom pyatiletii.)

PERIODICAL: "Tsvetnye Metally" (Non-ferrous Metals), 1957, No.5, pp. 14 - 23 (U.S.S.R.)

ABSTRACT: This article is concerned mainly with electrolytic aluminium production methods. Present equipment is characterised by low unit productivity (due to insufficient mechanisation and automation) and the nature of the electrolytic method dictates the high consumption of electrical energy. Working conditions are generally unpleasant. The possibilities of reducing electricity consumption by technological means (for example, the low current-density method dealt with by G.A. Abramov and others) and by improvements in plant design, such as reduction in the resistance of the anode and cathode systems, are considered. The use of covered electrolyzers is still under investigation and cannot be used in plants under construction. Discussing working conditions the author mentions the fruitfulness of the 1956 competition for improved bath-working mechanisms, which make the improvement of working conditions probable. Other promising design improvements are

Card 1/2

Development of aluminium production technology in the
sixth Five Year Period. (Cont.)

136-5-3/14

also mentioned. The possibilities of large capacity electrolyzers with current intensities of 125-130 kA, which are to be built in the U.S.S.R., are considered in the light of experience abroad, special attention being given to anode arrangements with overhead leads. Other questions considered in the article include the mechanisation of various labour-consuming operations, installations for waste heat utilisation, the automation of electrolyzer-operation and the economics of aluminium production. The last section deals with the electrothermic method in which aluminium and its alloys are produced by direct reduction of alumina-containing materials with carbon in electric furnaces to give aluminium-silicon alloys from which aluminium can then be extracted, e.g. with zinc. The advantages of this method over the electrolytic include the possibility of much higher unit productivities, the elimination of rectification, of the electric current and the fact that chemical enrichment of raw materials is unnecessary. There are 5 references, of which 2 are Slavic.

Card 2/2

AVAILABLE:

137-58-6-11927

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 106 (USSR)

AUTHOR: Bershteyn, Ya. A.

TITLE: Proposed Designs for New Aluminum Plants (Proyektnyye resheniya dlya novykh alyuminiyevykh zavodov)

PERIODICAL: Byul. tsvetn. metallurgii, 1957, Nr 8, pp 34-42

ABSTRACT: To eliminate shortcomings and perfect the present electrolytic method of producing Al, quite a number of new engineering solutions have been adopted in the field of aluminum-plant design. The current (I) in the cells is being raised from 60,000-70,000 to 125,000-130,000 amps. The increase in I is expected to raise the productivity of cell operators by ~35%, reduce capital outlay by 5-8%, and cut power consumption per ton Al by ~1000 kwh. The current will be led to the anode from above. This will simplify and facilitate the design of the cell superstructure, make it easier to service the anode, and cut labor costs. In addition, the cell will be sealed more dependably by a small gas-collecting hood fastened to the bottom of the anode jacket along the periphery of the anode and above the bath. The advantage of this hood lies in reducing the

Card 1/2

137-58-6-11927

Proposed Designs for New Aluminum Plants

volume of suction by $\sim 1500 \text{ m}^3/\text{hr}$ for a large cell as against 10,000-12,000 m^3/hr with the standard covering. This will make it possible to evacuate the most concentrated gases, will cut the cost of the plant and improve the efficiency of gas cleaning. The washing of the gases will yield NaF suitable for conversion to cryolite, 10-12 kg of which may thus be recaptured per t Al. Also envisaged is the employment of the sensible heat of the gases taken off by suction. Portable mechanisms for working the electrolyte crust and to eliminate hand labor are designed, also mechanized equipment and devices for delivering Al_2O_3 to the cells, machines for extracting the anode rods, and an automatic lathe to clean them after extraction from the anodes. A centralized vacuum cleaning system is provided to facilitate and modernize removal of dust from the department. The economic efficiency of these new engineering solutions is expressed in a cut of unit capital outlay by a maximum of 12-13% and by a cut in the cost of the metal of 3-4%. Envisaged for the future is the design of a roofed cell, which will be distinguished by the absence in it of any crust. This will simplify and ease cell servicing and will also make it possible to solve the problem first of continuous and then of automatic delivery of Al_2O_3 into the bath.

1. Aluminum--Production 2. Aluminum--Electrolysis 3. Industrial I.G.
plants--Design 4. Industrial plants--Equipment
Card 2/2

AUTHORS: Bershteyn, Ya.A. and Purits, M.F. 136-58-3-20/21

TITLE: The first aluminium works in Africa (Pervyy alyuminiyevyy zavod v Afrike)

PERIODICAL: Tsvetnyye Metally, 1958. Nr.3. pp. 90-93 (USSR)

ABSTRACT: An account is given of a new aluminium works in the French Cameroons. The article is based on non-Slavic sources of information. There are 6 figures and 7 non-Slavic references.

AVAILABLE: Library of Congress.

1. Aluminum industry-Africa

Card 1/1

BERGHEIM, N.A.

AUTHORS: ~~Bershteyn~~, Ya. A. and Purits, M. F. SOV/136-58-9-20/21

TITLE: The Aluminium Industry of France and the Construction of a new Aluminium Works Based on the Lac Natural-gas Deposits (Alyuminiyevaya promyshlennost' Frantsii i stroitel'stvo novogo alyuminiyevogo zavoda na baze prirodnogo gaza mestorozhdeniya Lak)

PERIODICAL: Tsvetnyye Metally, 1958, Nr 9, pp 84 - 88 (USSR)

ABSTRACT: The authors review the development of the aluminium industry in France and the French African possessions and go on to consider in some detail the possibilities of basing an aluminium works on the natural gas deposits recently discovered in S.W. France near the Pyrénées. There are 1 figure and 16 references, 6 of which are English, 6 French and 4 Soviet.

1. Aluminum industry--France 2. Natural gas--France

Card 1/1

BERSHTEYN, Ya.A.

First aluminum plant in Noger (France). TSvet. net 33 no.8:84-87
Ag '60. (MIRA 13:8)

(France—Metallurgical plants)
(Aluminum—Electrometallurgy)

BERSIK, M.

Increasing loom revolutions and labor productivity in the Utex National Enterprise.
p. 164.

(Textil. Vol. 12, no. 5, May 1957. Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October 1957. Uncl.

BERSIK, Miroslav; TRDLIKAT, Jaroslav

Material incentives, an effective tool for increasing the labor productivity. Prace 10 no.2:65-71 F '62.

1. Ministerstvo spotřebního průmyslu (for Bersik). 2. Vědecký ústav textilní, Brno (for Trdlikat).

DERJINSKY, V. K.

4

✓ Hypovitaminosis C as a factor which lowers immunity to diphtheria and prevents its development. (U. K. Derjinskij) (Med. Inst., Riga, Latvia). *Zhur. Mikrobiol. i Immunol.* 1935, No. 9, 18-23.—Hypovitaminosis C in guinea pigs prevents the development of immunity to diphtheria during active immunization. Cavitaminosis lowers established immunity to diphtheria. It is suggested that the administration of vitamin C to children during active immunization against diphtheria appears to be a practical approach.

MD
AA
MCT

MEDKOVA, L.; BERSKY, K.; BUBLIKOVA, D.; HAJEK, Fr.

Appearance of strabismus in children of mother with late pregnancy toxemia. Cesk. ofth. 15 no.4:254-257 Aug 59.

1. Oční oddelení OUNZ v Opave, prednosta prim. dr. J. Stefek
 - Porodnicko-gynekologické oddelení OUNZ v Opave, prednosta prim. dr.
 - O. Sipek Detské oddelení OUNZ v Opave, prednosta prim. dr. M. Zak
 - Psychiatrická lečebna v Opave, reditel dr. Fr. Hajek.
- (STRABISMUS, etiol. & pathogen) (PREGNANCY TOXEMIAS, compl.)

BERSLAVSKIY, A.S., kand.med.nauk; TSARIKOVSKAYA, N.G., kand.med.nauk

Effect of iodine preparations on the level of thyrotropic hormones
in the blood in patients with thyrotoxicosis. Sov.med. 23 no.9:
88-91 S '59. (MIRA 13:1)

1. Iz otdela gistofiziologii (rukovoditel' - prof. B.V. Aleshin) i
klinicheskogo otdela (rukovoditel' - prof. M.A. Kopelovich) Ukrain-
skogo instituta eksperimental'noy endokrinologii (dir. - kand.med.
nauk S.V. Maksimov).

(HYPERTHYROIDISM blood)

(IODINE pharmacol.)

(THYROTROPIN blood)

BERSNEV, Pavel Andreyevich

[The people's agricultural university] Narodnyi
sel'skokhoziaistvennyi universitet. Moskva, Prof-
izdat, 1964. 69 p. (MIRA 18:12)

MYL'NIKOV, V.A., inzh.; BERSON, A.I., inzh.

Making precision dividing disks. Mash.Bel. no.5:127-139 '58.
(MIRA 12:11)

(Dividing engines)

BERSON, A.I.

Precise machining of parts shaped as bodies of revolution.
Mashinostreitel' no.1:34 Ja '62. (MIRA 15:1)
(Grinding and polishing)

BERSON, A.I.

Device for applying inscriptions. Mashinostroitel' no.8:29
Ag '62. (MIRA 15:8)
(Engraving machines)

PLESHAKOV, I.B.; NESVIT, D.S.; HERSON, G.L.

Stratigraphy of Kronotskiy Tertiary sediments along the eastern
shores of the Kamchatka Peninsula. Avtoref. nauch. trud. VNIGRI
no.17:205-207 '56. (MIRA 11:6)
(Kamchatka--Geology, Stratigraphic)

BERSON, G.L.; DEMIDOVICH, L.V.

Some data on the jointing of Tertiary rocks of the Kamchatka Peninsula in connection with their reservoir properties.

Trudy VNIGRI no.165:208-236 '61.

(MIRA 14:8)

(Kamchatka—Oil sands--Permeability)

(Joints (Geology))

BERSON, G.L.; LOPATINA, S.K.

Reservoir properties of rocks of the Bogachevka series in the
Kronotskiy region on the eastern coast of Kamchatka. Trudy
VNIGRI no.186:327-341 '61. (MIRA 15:3)
(Kronotskiy region--Petroleum geology)
(Kronotskiy region--Gas, Natural--Geology)

BERSON, Garri Zalmanovich, kand. sel'khoz. nauk. Prinimal
uchastiye MESHCHERYAKOV, V.I.; SAZONOVA, L.V., spets.
red.

[Hydroponics in the Far North] Gidroponika na Krainem
Severe. Murmansk, Murmanskoe knizhnoe izd-vo, 1964. 126 p.
(MIRA 18:5)

1. Zamestitel' direktora Murmanskoy olenevodcheskoy opytnoy
stantsii (for Meshcheryakov).

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45342
B/181/63/005/002/017/051
B104/B102

AUTHORS: Riryukov, I., and Berson, I.

TITLE: The second moment of the nuclear resonance lines for nuclei with the spin 5/2

PERIODICAL: Fizika tverdogo tela, v. 5, no. 2, 1963, 499-501

TEXT: The second moment of the quadrupole resonance lines of nuclei with the spin 5/2 in an axisymmetrical electric field is calculated for the transition frequencies ν_0 and $2\nu_0$ and an arbitrary direction.

Results: a) Interaction between resonant nuclei:

$$\langle \Delta \nu \rangle_{\pi} = \frac{1}{\mu} 220 g^2 d^{-4}$$

$$\langle \Delta \nu \rangle_{\pi} = \frac{1}{\mu} 118 g^2 d^{-4}$$

(2)

(5)

(12)

The second moment of the nuclear ...

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B104/B102

$$\begin{aligned}\langle \Delta v^2 \rangle_{\text{op.}} &= \frac{1}{3h^2} I'(I'+1) a \left(1 + \frac{b}{a}\right) \\ \langle \Delta v^2 \rangle_{\text{op.}} &= \frac{1}{3h^2} I'(I'+1) a \left[1 + \frac{3}{8} \frac{2I'+1}{I'(I'+1)} \frac{b}{a}\right] \\ \langle \Delta v^2 \rangle_{\text{op.}} &= \frac{1}{3h^2} I'(I'+1) a\end{aligned}$$

(13).

ASSOCIATION: Institut organicheskogo sinteza AN Latv. SSR, Riga
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ENCLOSURE

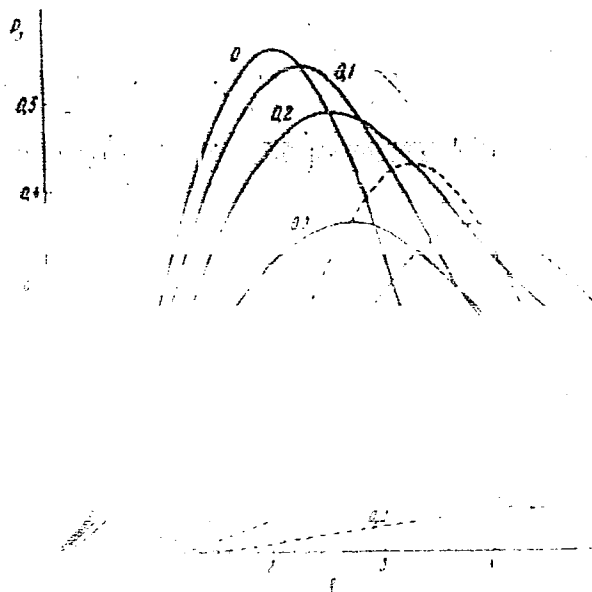
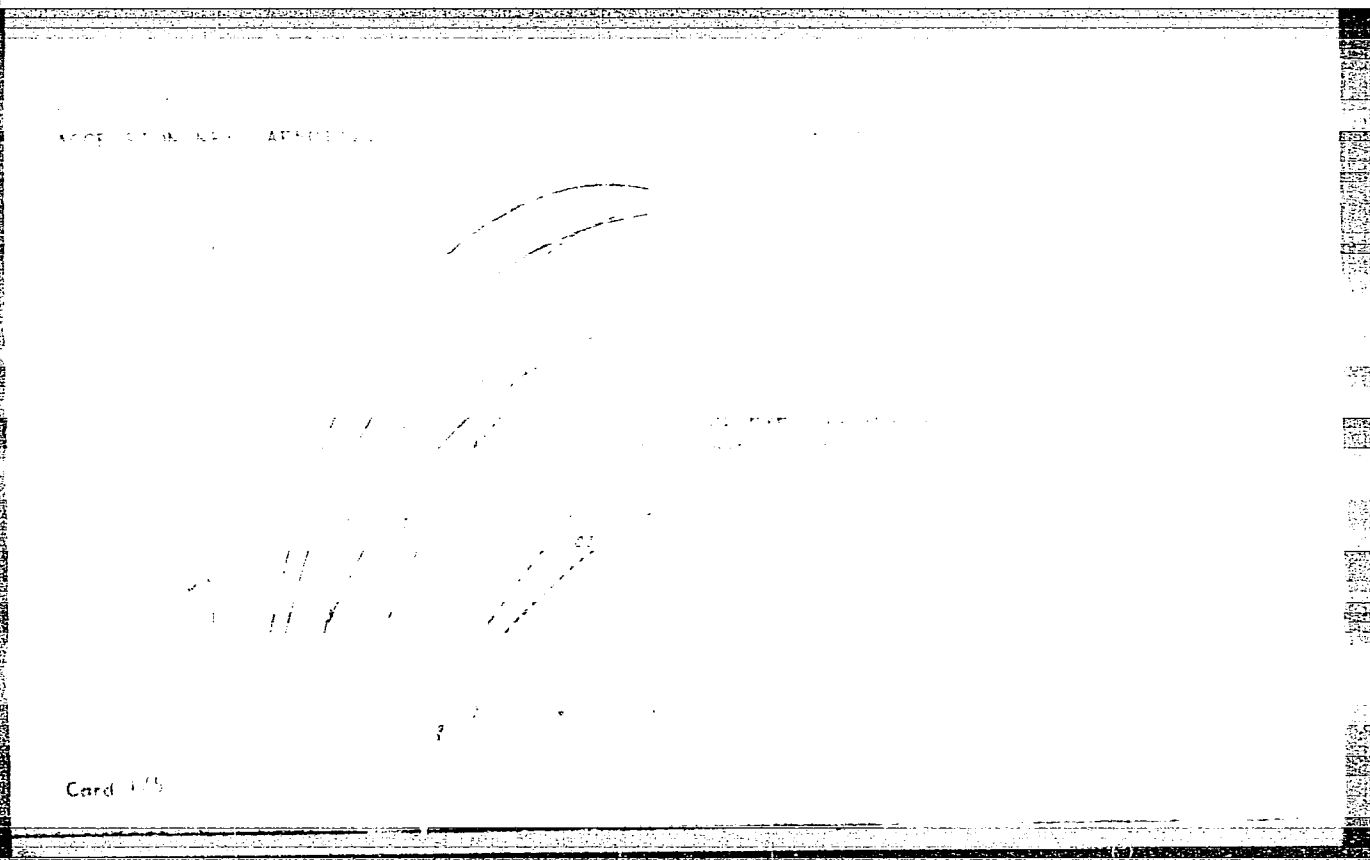
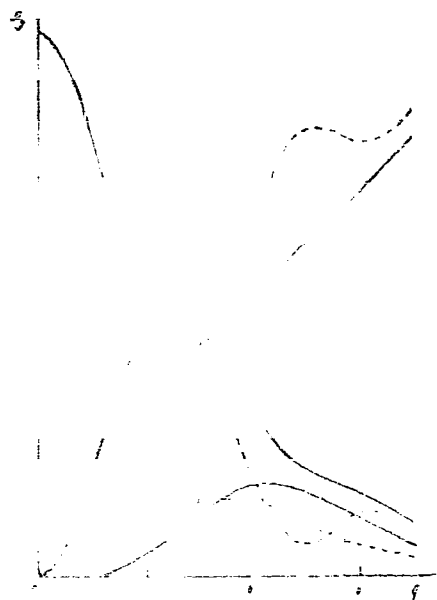


Fig. 1. Probability of excitation of the first solid





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TANATAR, I.Ya.; ZAKHAROV, M.V., polkovnik, redaktor; ~~BERSON~~, I.B., mayor,
redaktor; NIKITIN, G.N., tekhnicheskiiy redaktor.

[Aerology; method of pilot balloon observations from one point]
Aerologiya; metod sharov-pilotov, nabludaemykh s odnogo punkta.
Moskva, Voennoe izd-vo Ministerstva vooruzhennykh sil SSSR, 1948. 346 p. [Microfilm] (MIRA 8:1)
(Meteorology--Observations) (Balloons, Pilot)